



December 9, 2002

**SUBJECT:** Caltech Owens Valley Radio Observatory – Combined Array for Research in Millimeter-wave Astronomy - Response to the FCC Notice of Proposed Rule-making, in the matter of *Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands*, WT Docket No. 02-146

On behalf of the Owens Valley Radio Observatory and the Combined Array for Research in Millimeter Wave Astronomy I am pleased to provide comments on the FCC draft Notice of Proposed Rule Making indicated above. These comments are based on discussions with our scientists and engineers, and with our community of U.S. and international astronomers.

- a) We reiterate the importance of preserving the millimeter spectrum for radio astronomical studies, and believe that protection and coordination efforts must be maintained and include input from the radio astronomy community.
- b) We are concerned by the assertion that the mountainous geographic features adjacent to the Owens Valley Radio Observatory are being used to justify a reduced coordination radius around our Observatory. While it may be correct to say that telescopes on the valley floor enjoy some protection from distant transmissions, we are in the process of combining the Owens Valley Millimeter Array and the Berkeley-Illinois-Maryland Association array on a new high-altitude site in the region (with substantially longer line-of-sight to other areas of California and Nevada). Furthermore, we plan to expand our single-dish (total power) capabilities as an important part of the CARMA scientific mission – these could be severely affected by impacts due to lack of coordination. CARMA was the highest-ranked university-based astronomy facility for this decade in the National Academy of Science's *Decade Review of Astronomy & Astrophysics*, and has received numerous grants from federal agencies for its development. Negative impacts to its science mission due to interference arising from a lack of coordination must be avoided.

We thank you for the opportunity to review these proposed rules.

Sincerely

A.J. Beasley  
CARMA Project Manager,  
Owens Valley Radio Observatory